

REMARKS

The Applicants appreciate the thoroughness with which the subject application has been examined. By this amendment, changes have been made in the figures, specification and certain claims, as indicated above, to overcome the Examiner's objections and rejections and more concisely claim and describe the present invention. Claims 1-16 remain in the application for reconsideration by the Examiner. The Examiner's allowance of all pending claims is earnestly solicited.

MATTERS RELATED TO THE DRAWINGS

The Examiner has objected to Figure 1B due to the lack of a reference character number 92 in the Figure.

Attached hereto as Attachment 1, the Applicants submit a replacement sheet for Figure 1B, including the reference character 92. The replacement drawing sheet overcomes the Examiner's objection.

MATTERS RELATED TO THE SPECIFICATION

The Applicants have deleted the paragraph beginning at line 25 on page 9 as indicated above.

Several informal typographical errors have been identified and corrected as indicated above in the marked-up paragraphs of the specification.

MATTERS RELATED TO THE CLAIMS

Claims 1-16 stand rejected under Section 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicants regard as their invention. In particular, in subparagraph 5A, the Examiner suggests that certain terms in claims 2, 3, 8 and 9 lack an antecedent basis.

In response, the Examiner is invited to review the amendments to claims 2, 3, 8 and 9. It is respectfully submitted that these antecedent basis issues have been resolved by the Applicants' claim amendments.

In subparagraph 5B the Examiner states that certain identified word and phrases in various specified claims are indefinite.

As to the rejections set forth in paragraph 5B(i), the Applicants contend that it is not necessary for claim 1 to specify a limitation regarding the criteria used by the selector to select one of the plurality of scheduling schemes, as suggested by the Examiner. The selector element is not indefinite merely because a selection criteria is absent. It is not necessary for each claim element to specify limitations as to all aspects of its operation. The claims define the legal metes and bounds of the invention; they are not intended to define all operational aspects of the invention.

The Examiner's prima facie burden to show indefiniteness requires that he set forth an interpretation of claim 1 in light of the specification, as interpreted by one of ordinary skill in the art, and that he establish that the allegedly absent limitation reasonably renders the claim indefinite. The Applicants' argue that when claim 1 is interpreted by one skilled in the art in light of intrinsic and extrinsic evidence, the claim, in particular the selector element, is not indefinite.

As to the indefiniteness rejection set forth in paragraph 5B(ii), the Applicants have amended the cited claims to overcome this rejection. The Examiner is invited to review these amendments as set forth in claims 2 and 4 above.

As to the indefiniteness rejection set forth in paragraph 5B(iii), the Applicants have addressed and resolved this rejection according to the amendments to claims 2 and 3 as set forth above in the marked-up version of the claims.

As to the indefiniteness rejection set forth in paragraph 5B(iv), the Examiner has again failed to meet his prima facie burden for an indefiniteness rejection. The Applicant is not required to claim all details of the invention within a claim, but merely is required to set forth the invention so that the claim can be interpreted according to intrinsic and extrinsic evidence by one skilled in the art.

As to the indefiniteness rejection set forth in paragraph 5B(v), the Applicants have carefully reviewed claim 9 in light of these rejections and have amended the claim as set forth above. The Examiner's comments as to the "selected scheduling scheme" and the "eligible queue output signal" are respectfully traversed as it is believed that the claim language adequately defines the invention. As to the "selected scheduling scheme" element, the Examiner is invited to review the Applicants' remarks above relative to the indefiniteness rejection set forth in paragraph 5B(i). The "eligible queue output signal" is an output signal that is adequately defined by claim 9. As to the "class selector" indefiniteness rejection, the

Examiner is invited to further review the last paragraph of claim 9 wherein the class selector is identified as, “determining the data to be serviced in response to the eligible queue output signal . . . and further in response to the selected scheduling scheme.” Thus in fact there is a connection between the controller and the class selector in the form of “the selected scheduling scheme.”

As to the indefiniteness rejection set forth in paragraph 5B(vi), the Examiner’s comment is not understood. The smooth deficit weighted is not compared to anything, but is one scheduling scheme described in the specification.

As to the Examiner’s comments in paragraph 5B(vii), the Examiner is invited to review claims 15 and 16 as the Applicant has amended the claims in response to certain of the indefiniteness deficiencies identified in claims 1-9 above.

Within the first claim group, claim 1 stands rejected under Section 102(b) as anticipated by Vaitzblit (5,528,513). Dependent claims 2, 3, 6 and 8 stand rejected under Section 103(a) as unpatentable over Vaitzblit. Claims 4 and 7 stand rejected under Section 103(a) as unpatentable over Vaitzblit in view of Courtright (6,157,963). Finally, claim 5 stands rejected under Section 103(a) as unpatentable over Vaitzblit in view of Courtright and further in view of Joffe (6,014,367).

To further define the invention over the cited art, the Applicants have amended claim 1 as set forth above in the marked-up version of the claim. In particular, the Applicants have amended the first paragraph to, “a circuit module capable of implementing a plurality of scheduling schemes,” and have amended the second paragraph to, “a selector for selecting at least one of the plurality of scheduling schemes, wherein the network resource processes data according to one or more selected scheduling schemes.”

Vaitzblit discloses a scheduling policy for a continuous media server. Scheduling is accomplished in a hierarchical manner with isochronous tasks having the highest priority followed by real-time and then general-purpose tasks. The Vaitzblit scheduler applies a round-robin priority scheme to the general purpose tasks (Vaitzblit column 5 lines 16 and 17) and a weight monotonic scheduling algorithms for the isochronous tasks (column 6, lines 32 and 33). There is no disclosure, suggestion or inference in Vaitzblit of, “a circuit module capable of implementing a plurality of scheduling schemes and a selector for selecting one or more of the plurality of scheduling schemes.” The Examiner has apparently confused the concept of assigning a priority to certain tasks, such as isochronous, general

purpose and real-time tasks, with the process of selecting a scheduling algorithm according to which those tasks are executed.

It is respectfully submitted that each of the dependent claims 2-8 depending from amended independent claim 1 includes one or more elements that further distinguish the invention over the art of record. These claims should therefore be in condition for allowance.

Within the second group of claims, independent claim 9 and dependent claims 10, 11, 13 and 14 are rejected under Section 103(a) as unpatentable over Vaitzblit in view of Courtright and in view of Calamvokis (5,572,522). Dependent claim 12 stands rejected under Section 103(a) as unpatentable over Vaitzblit in view of Courtright and further in view of Joffe.

The Applicants respectfully submit that none of the art cited against independent claim 9 discloses, suggests, or motivates, “a controller for supplying a signal indicating one or more selected scheduling schemes . . . , a plurality of scheduling blocks . . . and a class selector . . . ,” as set forth in amended independent claim 9.

Vaitzblit has been discussed at length above and claim 9 is considered patentably distinct therefrom.

Courtright, “prioritize[s] and schedule[s] . . . I/O requests in accordance with a scheduling algorithm.” At a minimum, Courtright does not disclose, suggest or motivate, “a controller for supplying a signal indicating one or more selected scheduling schemes” as set forth in the Applicants’ claim 9.

Calamvokis discloses, “an ATM switch with multicast capability that internally uses input and output identifiers to identify the cell input and output streams.” Calamvokis’s reference to a scheduling block 75 pertains to the sending of eligible ATM cells, not to scheduling data processing tasks.

Even when considered collectively, the Vaitzblit, Courtright and Calamvokis references do not disclose the elements of the Applicants’ invention as set forth in amended claim 9. There is also no teaching, suggestion, or motivation as to how one might combine the Vaitzblit, Courtright and Calamvokis references to disclose the Applicants’ invention, nor how one would arrive at the Applicants’ invention if such combination was permissible. Vaitzblit and Courtright relate generally to scheduling tasks, while Vaitzblit is specifically concerned with continuous media files. Calamvokis is distinguished from both Vaitzblit and

Courtright in that it discloses a technique for multicasting ATM data streams. There is no scheduling feature for different classes or tasks associated with Calamvokis. Since the three references relate to different technologies, they are not combinable according to the rules of reference combinations.

The Examiner's statement setting forth his rationale for permitting the combination is wholly conclusory and lacking any disclosure that suggests such a combination. In particular, the Examiner's reliance on a "class selector" in the combination is misplaced since such a class selector is not present in all of the three references.

Dependent claims 10-14, depending from claim 9 and rejected as set forth above, each include one or more elements that further distinguish the invention over the art of record. These claims should therefore be in condition for allowance.

Independent claim 15 has been rejected under Section 103(a) as unpatentable over Vaitzblit.

It is respectfully submitted that amended claim 15 is allowable over the art as cited. In particular, there is no disclosure, suggestion or motivation in Vaitzblit related to the Applicants' three steps set forth in amended claim 15, including, "determining the user's selected scheduling scheme," and processing the data received from subscribers according to either a first selected scheduling scheme or a second selected scheduling scheme.

In his rejection of claim 15, the Examiner appears to have confused the concept of priority tasks processed according to different scheduling schemes, as he suggests Vaitzblit discloses, with the Applicants' invention comprising determining the user's selected scheduling scheme and applying the selected scheduling scheme to data from the plurality of subscriber classes. It is therefore respectfully submitted that claim 15 as amended above is patentable over the cited art.

Claim 16 has been rejected under Section 102(b) as anticipated by Vaitzblit.

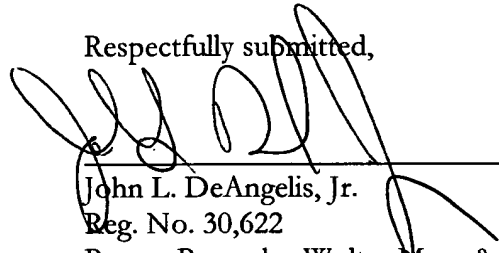
As discussed above in conjunction with the rejection of claim 1, the Applicants' suggest that there is no disclosure in Vaitzblit of a, "scheduler for selecting a scheduling schemes," as set forth in amended claim 16. Nor does Vaitzblit disclose, "a first module comprising a plurality of scheduling schemes and a selector for selecting one of the plurality of scheduling schemes." Amended claim 16 should therefore be in condition for allowance.

The Applicants have attempted to comply with all of the points raised in the Office Action and it is believed that claims 1-16 remaining in the application are now in condition

for allowance. In view of the foregoing amendments and discussion, it is requested that the Examiner's claim rejections have been overcome. It is respectfully requested that the Examiner reconsider these rejections and issue a Notice of Allowance for all the claims pending in the application.

If a telephone conference will assist in clarifying or expediting this Amendment, Examiner Ngo is invited to contact the undersigned at the telephone number below.

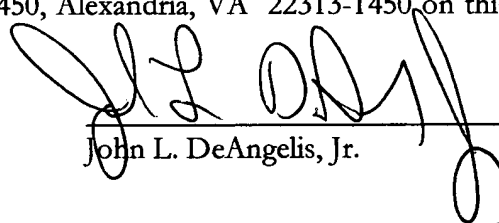
Respectfully submitted,



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CERTIFICATE OF MAILING

I HEREBY CERTIFY that this Amendment is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 14th day of July, 2005.



John L. DeAngelis, Jr.

ATTACHMENT 1

Replacement Sheet for Figure 1B